

DRAFT CLIMATE CHANGE IMPACT VULNERABILITY ASSESSMENT AND RESILIENCY PLAN for the DELTA PROTECTION COMMISSION

Identify Projects or Activities Vulnerable to Climate Change Impacts

The Delta Protection Commission's (Commission) activities are guided by its legislatively mandated "Land Use and Resource Management Plan for the Primary Zone of the Delta" (Regional Plan) prepared and adopted in 1995 by the Commission. The Regional Plan, with which local Delta government General Plans must provide consistency, contains Findings, Policies and Recommendations for carrying out the policies in eight subject areas: Environment; Utilities and Infrastructure; Land Use; Agriculture; Water; Recreation and Access; Levees; Marine Patrol, Boater Education, and Safety Programs.

Staff of the Commission has identified Policy areas in the Regional Plan where it appears the subject area may potentially be vulnerable to climate change impacts, particularly sea level rise. Vulnerabilities in the Delta primary zone that can be anticipated relative to climate change, particularly sea level rise and change in water quality conditions identified by staff include: flooding of agricultural lands; water quality utility; flooding of waterside habitat; flooding of populated areas; flooding of utilities and infrastructure; levee vulnerability; and impacts on recreation access due to flooding. Those areas include, but are not limited to, the following policies of the Regional Plan (the text is summarized for sake of brevity):

Environment

- Policy 1: If current agriculture on prime soils is no longer feasible (due to subsidence or water concerns), the land shall remain reinstatable to agricultural production for the future.

Utilities and Infrastructure

- Policy 5: Surface transportation in the Delta can be dangerous and congested. Roads shall be maintained to serve agriculture, recreation and Delta residents and through traffic should be directed to surrounding highways and freeways.
- Policy 7: Draw and swing bridge operation needs to balance land and water traffic.

Land Use

- Policy 2: Local government general plans shall continue to strongly promote agriculture as the primary land use in the Primary Zone and recreation shall be supported in appropriate zones and where those uses do not conflict with agriculture or other beneficial uses such as waterside habitat.

Agriculture

- Policies 1, 4, 5: Commercial agriculture shall be supported and encouraged as a key part of the food supply for the state, nation and world. Local government shall support long term viability of delta agriculture. Improving crop production and agricultural income is vital to the success of Delta agriculture.
- Policy 2: Local governments shall identify the unique qualities of the delta making it well suited for agriculture and agricultural landowners must maintain extensive levee systems, provide flood control and adequate drainage to allow the lands to be farmed.
- Policy 7: Local government shall encourage acquisition of agricultural conservation easements as mitigation for projects and environmental mitigation in agricultural areas should only be promoted when compatible with agriculture and in appropriate locations according to a habitat plan.
- Policy 8: Local governments shall encourage management of agricultural lands which maximize wildlife habitat seasonally and year-round.

Water

- Policy 1: Local governments shall ensure that salinity in delta waters allows full agricultural use of delta agricultural lands, provide habitat for aquatic life, and meet requirements for drinking water and industrial uses.
- Policy 2: Local governments shall ensure that any flooding program to provide seasonal habitat on agricultural lands shall incorporate best management practices to minimize mosquito breeding and shall coordinate with local vector control districts.

Recreation and Access

- Policy 1 and 2: Local governments shall promote expansion and maintenance of existing public recreation areas over construction of new public facilities.
- Policy 3: Local governments shall develop siting criteria for recreation projects to ensure minimal adverse impacts on agricultural land uses, levees, public drinking water supply intakes and identified sensitive wetland and habitat areas.

- Policy 9: Local governments shall encourage new recreation facilities that take advantage of the Delta's unique characteristics.

Levees

- Policy 1: Local governments shall ensure that Delta levees are maintained.
- Policy 3: Through flood ordinances based on FEMA model ordinances, local governments shall carefully and prudently carry out their responsibilities to regulate new construction within flood hazard areas to protect public health, safety and welfare.
- Policy 4: Local governments shall ensure that existing programs for emergency levee repair be strengthened and better coordinated between local, State and federal governments.

Identify strategies to promote resiliency to identified impacts

The Commission's 2006-2011 Strategic Plan and some Regional Plan Recommendations provide strategies to promote resiliency to identified impacts to the Delta identified above. They are listed here:

Delta Protection Commission 2006-2011 Strategic Plan and the Regional Plan provide strategies that would enhance the promotion of resiliency to the climate change impacts to the Primary Zone of the Delta. These strategies are demonstrated by the following abbreviated statements from the Strategic Plan.

Program Strategy: Fully Implement the Delta Protection Act by effectively integrating the Regional Plan into local government general plans; Act as the appeal body for inconsistencies between general plans and the Regional Plan; Implement the Regional Plan on a prioritized basis and consistent with the Act; participate actively in the development of a long-range Delta-wide vision and management plan in which the Regional Plan would be included; Initiate a proactive approach to collaborative participation in legislative and regulatory efforts so that the Commission's influence is represented in all discussions of proposed relevant legislation and regulatory change.

Strategic Work Plan goals for Implementation of the Regional Plan for the Primary Zone of the Delta

Environment: enhance educational awareness of the benefits of an adaptive working landscapes approach to managing agricultural and habitat resources in the delta; explore options for balancing environmental mitigation with other land uses, including agriculture and flood protection; explore options for best land use practices that reduce or reverse subsidence.

Utilities and Infrastructure: Consider long-term impact mitigation opportunities (to protect the Delta from excessive construction of utilities and infrastructure facilities)

Land use: Actively participate in the Delta Vision process (to protect the unique character and qualities of the Primary zone)

Agriculture: Establish a forum for Delta-wide collaboration among agricultural interests on common activities and issues and establish a program for Delta agricultural easements (to support the long term viability of commercial agriculture and discourage inappropriate development of agricultural lands).

Water: Develop programs for Delta-wide collaboration to effectively address water quality issues including salinity intrusion and participate in data collection/monitoring programs relative to salinity (to protect long-term water quality in the Delta for all designated beneficial uses)

Levees: Pursue efforts to enhance recognition of public health and safety as a priority, facilitate forums of discussion on Delta-wide emergency response and other hazard-related topics (to support the improvement and long-term maintenance of Delta levees)

Regional (Management) Plan Policy recommendations that may help promote resiliency to climate change impacts to the Delta include but are not limited to:

Environment Recommendation 7: Lands currently managed for wildlife habitat should be protected particularly from destruction from inundation.

Utilities and Infrastructure Recommendations 1,2,3,6,7: Railroad rights of way in and around the Delta should be protected as transportation corridors; bridges provide critical links within the delta and must be maintained; existing commercial shipping channels should be maintained and deepened if appropriate; groundwater wells should be monitored for salt water intrusion; natural gas production will continue to be an important use of Delta resources and structures should be consolidated to minimize impact to agriculture and wildlife.

Land Use Recommendation 2: Thousands of acres of agricultural lands have been / are being considered for purchase to restore to wildlife habitat. The amount, type and location of such land should be studied by wildlife experts to determine goals for future acquisition and restoration. Lands acquired for wildlife habitat should also be evaluated for recreation, access, research and other needed uses in the Delta.

Agriculture Recommendation 3: The five Delta county Farm Bureaus should coordinate on issues of joint concern.

Water Recommendations 1,2,3,5,6,8: Delta waterways should continue to serve as a primary transportation system moving water to the State's natural and developed water systems; delta water rights should be respected and protected; programs to enhance the natural values of the State's aquatic habitats and water quality will benefit the Delta and should be supported; water for flooding to provide wildlife habitat should be provided as part of state and federal programs; water quality monitoring programs should measure Delta waters to ensure they meet water-contact recreation and other water quality standards; water quality at Delta drinking water intakes should be maintained or enhanced.

Recreation and Access Recommendation 3: New projects in the Secondary Zone, adjacent to the Primary zone, should include commercial and public recreation facilities which allow safe, supervised access to and along the Delta waterways.

Levee Recommendations 1,9,10,12, 14: Levee maintenance, rehabilitation and upgrading should be established as the first and highest priority of use of the levee; the program for emergency levee repair should be strengthened; maintain an inventory of the current status of Delta levees meeting various standards; levee maintaining agencies and fish and wildlife agencies should continue to cooperate to establish appropriate vegetation guidelines; support on-going USACE studies and programs that could provide funding, flood protection and environmental restoration on delta islands.

Marine Patrol Recommendation 1: the Coast Guard should host at least one and preferably two meetings per year of marine patrol programs to promote coordination and communication among the programs of counties, cities, ports, Department of Fish and Game, Department of Parks and Recreation and any non profit groups providing education and training or patrol services in Delta waters.

Conclusion

While the potential influence of climate change on the Primary Zone of the Delta was not recognized in 1995 when the Commission Regional Plan was adopted, the Commission's Strategic Plan identifies, through goals and strategies, areas in which climate change should be addressed. The Commission has initiated a process to update the policies of the Regional Plan (anticipated to be completed by December 2008) and addressing climate change will be a component of the update.